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ORIGINAL

Report to the Federal Communications Commission on Carrier Efforts Toward Attaining Digital TTY Accessibility, and the Status of the Various Technological Solutions, as Provided by CC Docket No. 94-102, In the Matter of Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems

Cal-One Cellular, L.P. ("Cal-One"), by its attorneys, pursuant to the Federal Communications Commission's ("Commission") *Fourth Report and Order* in CC Docket No. 94-102,[1] hereby files a Quarterly Report for the quarter ending March 31, 2001, detailing its efforts towards attaining digital TTY accessibility, and the status of the various technological solutions that will help it attain that goal.

In the *Fourth Report and Order* the Commission established December 31, 2001 as the new deadline for carriers operating digital wireless systems to have obtained all software upgrades and equipment necessary to make their systems capable of transmitting 911 calls from TTY devices. It further established June 30, 2002 as the deadline for carriers to integrate, test and deploy the technology in their systems in conjunction with the public safety community. In order to be assured that the aforementioned deadlines will be met without complication, the Commission required digital wireless carriers to submit Quarterly Reports fifteen days after the end of each quarter.[2] Cal-One now files this instant report with the Commission.

I. Carrier Background

Cal-One provides analog CMRS wireless service in the California 1 - Del Norte RSA.[3] Cal-One currently does not offer digital service in the above-referenced markets. As such, Cal-One has the ability to route, and will route calls to a TRS provider via the 911 dialing code over its analog network. Cal-One, however, intends to upgrade its network to provide digital wireless service in the near future, and as such is exploring issues related to providing TTY access to 911 over digital wireless service, including its ability to comply with the implementation deadlines established in the *Fourth Report and Order*.

[1] In the Matter of Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, *Fourth Report and Order*, CC Docket No. 94-102, 15 Fcc Rcd 25216, 65 Fed. Reg. 82293 (December 28, 2000), ("*Fourth Report and Order*").

[2] *Id.*

[3] Station KNKN233 (CMA336B).

II. Access to E911 Through TTY Devices

Cal-One uses analog AMPS equipment provided by Motorola, Inc. ("Motorola") for its wireless network infrastructure. In response to Cal-One's inquiry, Motorola has provided a status update on its progress in achieving full compliance with the Commission's Rules which may be applicable to Cal-One in the future. Motorola's response is appended hereto as **Exhibit A**. Cal-One **is not** independently capable of verifying the information presented therein, but has no reason to believe that it is not accurate.

Finally, the primary handset providers to Cal-One are Motorola and Nokia. Cal-One has recently requested that these handset manufacturers provide information on their progress in achieving full compliance with the Commission's rules from the standpoint of providing TTY-compatible digital handsets in sufficient time to allow for testing and compliance with the applicable in-service deadlines. Cal-One has not yet received responses to these queries, and therefore cannot report on these development activities.

The appended Motorola information is respectfully submitted in response to these issues, as required in the Commission's *Fourth Report and Order* (rel. Dec 14, 2000).

A. Development Activities

(1) Network Infrastructure Software Development

(2) Handset Development and Testing Plans

(3) Beta Testing and Lab Testing

(4) Release and General Availability to Carriers of Network Infrastructure Software

(5) Availability to Carriers of Full Acceptance Test Units

(6) Efforts Toward Achieving Digital Wireless Solution Compatibility With Enhanced TTY Devices

B. Testing and Deployment Activities

(7) Carrier Coordination of Testing With PSAP

(8) Carrier Testing Activities, Including Field Testing, Consumer End-to-end Testing, and Other Necessary Tests

(9) Retail Availability of Necessary Consumer Equipment

(10) Geographic Scope of Network Infrastructure Deployment

Cal-One does not presently offer digital service and therefore has not undertaken any testing and/or deployment on its network as of this date.

Respectfully Submitted,

Cal-One Cellular, L.P.

April 13, 2001

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It's Attorneys

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EXHIBIT A

Motorola CDMA Infrastructure Status of TTY Support

28 March 2001

Tom Weiss, Motorola CDMA Infrastructure Product Manager for TTY Support Feature

1. TTY support on the Motorola CDMA network is implemented via optional feature 4454. This implementation follows the IS-127 (EVRC) and IS-733 (13K) vocoder standard recommendations as submitted by Lucent. This solution is agreed upon by the industry (TTY Forum) to be the best way to meet FCC requirements for TTY support. Our implementation is closely coordinated with Lucent to ensure maximum compliance with the specifications, to include code-level information exchanges.

2. Motorola's implementation is a software based solution with development impacts only on the vocoder itself (which resides on the transcoder (XCDR) board in the CBSC subsystem). The OMCR has an enable/disable command as well. Otherwise, cellular call processing is unaffected. The feature works by dynamically detecting Baudot codes; the feature is always on (once enabled), and hence easily supports requirements such as VCO/HCO.

3. The Motorola HXCDR board (SGLN4971xx) is required to run this feature; previous versions of XCDR boards cannot support the modified vocoder. It is our understanding that virtually all Motorola CBSC's in the U.S. market already have the HXCDR.

4. The optional 4454 feature is supported as of the CBSC code load known as 2.15.0.39.10. A license is required to use the optional 4454 feature. The CBSC load is orderable as of 4/4/01 for markets in which R15 FOA has taken place; the load is targeted for General Availability by the end of May 2001. The deployment of this load and contractual terms of the optional 4454 feature can be coordinated through local Motorola account teams.

5. This CBSC load has been tested per normal Motorola process (subsystem test, system test, etc.). In our lab environment we have successfully tested this feature with both Qualcomm and Motorola mobiles which support the TTY feature. The work on the mobile side is very similar to the work on the infrastructure side – modifications to the vocoder per IS-127 and IS-733. Our tests include all permutations of calls such as L-M, M-L, M-M, and even EVRC-13K M-M calls. All have been successful. Commercial availability status of specific TTY-supporting Motorola mobile models should be requested from Motorola PCS account team members.

6. Motorola welcomes the opportunity to coordinate further testing of the TTY solution with U.S. operators. Specific test items such as PSAP testing, drive testing, etc., cannot be accomplished in a lab environment without an actual commercial cellular network. Furthermore, each operator has a different set of mobiles with which they desire to test the solution, and this is best accomplished on their own network in a live environment. Motorola has not coordinated any such testing with any U.S. operator at this time.

End of Report

MOTOROLA
TTY COMPATIBILITY DEVELOPMENT STATUS REPORT
1ST Quarter 2001

Product	On Target*	Status	Issues
CDMA Handset	Yes	Development	
GSM Handset	Yes	Development	
IDEN Handset	Yes	Integration	
TDMA Handset	While beta plans are on target there is some uncertainty in the production schedule	Development	Reviewing issues with the Standard reported by Ericsson at TTY Forum 17
CDMA Infrastructure	Yes	Integration	
IDEN Infrastructure	Yes	Integration	

* On Target is defined as supplying carriers with product by 12/31/01 per FCC Fourth Report and Order, CC Docket No. 94-102

Note: Motorola is working with its carrier customers and provides them with more specific information related to their respective products.

CERTIFICATE OF SERVICE

I, Carol A. Mindzak, a secretary with the law firm of Kurtis & Associates, P.C., do hereby certify that I have this 13th day of April 2001, filed the foregoing "REPORT TO THE FEDERAL COMMUNICATIONS COMMISSION ON CARRIER EFFORTS TOWARD ATTAINING DIGITAL TTY ACCESSIBILITY, AND THE STATUS OF THE VARIOUS TECHNOLOGICAL SOLUTIONS, AS PROVIDED BY CC DOCKET NO. 94-102, IN THE MATTER OF REVISION OF THE COMMISSION'S RULES TO ENSURE COMPATIBILITY WITH ENHANCED 911 EMERGENCY CALLING SYSTEMS" electronically with the Federal Communications Commission's Electronic Comment Filing System. I have also filed a diskette copy of this report with the Federal Communications Commission's copy contractor, International Transcription Service. In addition, on this date, I have served copies of this Report via hand delivery or e-mail to the following:

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